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ABSTRACT

To meet the need for trained personnel in the agriculture building industry, an agricultural building serviceman program was developed to prepare graduates for entry-level positions in this expanding fi-ld. The purpose of the study was to evaluate and improve the curricul-m by determining the specific job skills required. Employers and former students were surveyed via a mailed questionnaire or personal interview. In addition to more general questions, each questionnaire included a list of over 50 skills required to build a pole-type structure, and respondents were asked to check the frequency of use of each skill in the work situation. Results of the survey are presented in both narrative and tabular form. Both employers and graduates felt that the present curriculum was adequate for entry-level employment. The four skills listed within the highest rank order by both employers and graduates were: locating corners of buildings, leveling corner poles, locating building lines, and testing corners for squareness. Students felt that the greatest weaknesses of the program were the number of students in the class and the length of the course. The appendix includes the survey cover letter and questionnaires. (RG)

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FINAL REPORT

Project No. 03-026-151-225

EMPLOYER EVALUATION FOR THE LAYOUT AND ERECTION OF AGRICULTURE POLE BUILDINGS, DAIRY EQUIPMENT AND MATERIALS HANDLING

Southwest Wisconsin Vocational-Technical Institute

Fennimore, Wisconsin

September, 1975

VT 102 455

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Project No. 03-026-151-225

EMPLOYER EVALUATION FOR THE LAYOUT AND ERECTION OF AGRICULTURE POLE BUILDINGS, DAIRY EQUIPMENT AND MATERIALS HANDLING

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September, 1975

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Finally, gratitude is expressed to all the agricultural and farm building managers and owners throughout the State of Wisconsin. Through the cooperation of these people as well as the graduates of Agricultural Building Serviceman the distribution, collection and return of this survey instrument and the results and final report would have been impossible to produce.

SUMMARY

A study to determine the basic competencies that are necessary to obtain job-entry level employment as an agricultural building serviceman was conducted at the Southwest Wisconsin Vocational-Technical Institute from March to July, 1975.

The survey instrument was distributed to employers and graduates of Agricultural Building Serviceman programs from the Wisconsin Vocational, Technical and Adult Education System. The results of this survey represented opinions of the employer and graduates of the Agricultural Building Serviceman program in the field of agricultural buildings. The survey made no attempt to determine the degree of competency in the farm building skills by employers or employees but to analyze and validate tasks and job functions as determined by frequency of performance, difficulty of performance and length of time performed. Due to the rapid growth and change found in the farm structure industry, some of the tasks that are performed periodically on the job are not identified and therefore results are not tabulated.

CHAPTER I
INTRODUCTION

THE PROBLEM:

The rapid nationwide increase in the agricultural buildings industry has created a demand for trained personnel within the state and nation. This rapid growth has accounted for sales increasing from 7.2 billion in 1972, to over 8 billion in 1974. In addition, the farm building industry has also accounted for an increasingly large portion of the increase of general construction job openings.

Therefore, a large number of trained personnel will be necessary in future years within this growth industry. The Agricultural Building Serviceman program which is unique to Southwest Wisconsin Vocational-Technical Institute has grown in enrollment from 9 students in 1970, to the present 22 in 1974. Pre-registration for fall semester 1975, has more than doubled the registration figures for spring 1973. The placement results of the more recent graduating class has served as further example for increased needs in this area. In 1972, over 90 percent of the graduates secured employment, with an average salary in excess of $6,700 per year. In 1973, graduates secured employment with a net average wage of over $7,600 a year, with over 93 percent of the graduates being employed. While most of the graduates were employed in the District, an increased number are being employed statewide.

To develop a realistic curriculum it is necessary for institute staff to spend sufficient time and effort to design curriculum of a nature that will allow pre-employment education and extension training. Recent advisory committee meetings within the program area have indicated their strong endorsement of this need.

THE OBJECTIVE OF THIS STUDY:

The overall purpose of this project is to evaluate the curriculum utilizing job skill validation to develop a curriculum outline adequate for statewide use thru part-time extension programs and in the full-time Agriculture Building Serviceman program. Specific objectives include the following:

(1) Identify and analyze task inventory relevant to layout and erection of agricultural pole buildings, dairy equipment and materials handling and incorporate into a survey instrument.

(2) Analyze and validate task and job functions of graduates and former students of the program in terms of frequency of performance, difficulty of performance, length of time performed, importance and projected needs through a mail and interview survey of former students and their employers.

(3) Evaluate current curriculum in terms of former students and employers responses.

ACTIVITIES AND PROCEDURES:

This project will be conducted by the Southwest Wisconsin Vocational-Technical Institute Agricultural Building Serviceman instructor working with the Administrator of Research and Planning in cooperation with the Administrator of Instructional Services and Agricultural Division Chairman. A list of agricultural builders and a list of graduates of Agricultural Building Serviceman will be obtained. A random number of agricultural builders and graduates will be contacted either personally or through a mailed document. Upon completion of the personal interviews and after obtaining the results of the mailed questionnaire, data will be compiled and analyzed with recommendations being developed for proposed changes in the Agricultural Building Serviceman program.

PROPOSED TIME SCHEDULE

March, 1975

(1) develop questionnaire
(2) identify agricultural builders
(3) identify graduates

April - May, 1975

(1) conduct the survey

June, 1975

(1) tabulate the results
(2) analysis the data
(3) write the final report

CHAPTER II
METHODOLOGY

A computerized random sample of employers and graduates of the Wisconsin Agricultural Buildings program were surveyed to determine skills that were necessary to obtain basic competencies in order to meet the requirements for job-entry level employment in the agricultural buildings trade.

The author prior to initiating the survey researched available references at Southwest Tech and thru the ERIC system. Related literature for this survey was also assembled from the libraries of the University of Wisconsin-River Falls and of the University of Wisconsin-Platteville.

An initial rough draft of the survey was prepared during March, 1975. A number of questions were inserted along with the list of skills and tasks necessary for the trade which would reveal in more detail specific strong or weak points which may be present in agricultural building curriculum.

The researcher presented the basic survey concepts to the Agricultural Building Serviceman Advisory Committee for the proposed survey. During a thorough review by members of the advisory committee, many constructive suggestions and revisions of the survey instrument were received. The advisory committee also reviewed the revised instrument to determine if listed job-entry skills and tasks were valid. The final instrument represented a computation of basic skills repeatedly indicated by employers interviewed and curriculums reviewed of the farm buildings area. The final instrument then accumulated information necessary for the training of people for the specific purpose of erection of agricultural structures.

The list of employers in the agricultural buildings trade was acquired from Reiman Associates which is the publisher of Farm Building News. This publication deals entirely and specifically with the farm building trade. The list of graduates surveyed in this instrument was provided by the Wisconsin Vocational Agricultural Buildings program.

On April 15, 1975 the survey instrument was distributed to employers of the farm building trade and graduates of Agricultural Building Serviceman. The researcher also personally delivered selected survey instrument utilizing the personal interview method with the employer or graduate. Personal interviews conducted throughout the State of Wisconsin took place in the months of May and June. All survey instruments that were returned to the investigator by June 6, 1975 were included in the final tabulation and analysis.

CHAPTER III
RESEARCH FINDINGS AND ANALYSIS

The following employer and graduate characteristics are based on the results of 75 surveys which were sent to 50 employers and 25 students. One survey instrument was used which included a section for graduates and a section for employers. The instrument also contained a general section which included agricultural building competencies for both groups of respondents. The questions on both the graduate and employer section were similar but not identical.

The results of the survey were tabulated and will be illustrated in this chapter of the final report. Analysis of the data was conducted with the intention to determine strengths and weaknesses of present curriculum.

EMPLOYER CHARACTERISTICS: PART I

The first section of the employer survey was designed to determine aspects related to the company with which the employer was associated. Questions asked included the following:

(1) what is the name of the construction company with which the individual was associated

(2) what was the job status of the respondent

  (a) owner
  (b) company manager
  (c) general foreman

Other questions included to determine characteristics of the respondents and their companies are as follows:

(1) how many years in agricultural buildings trade did the respondent have in his background

(2) what was the number of employees in this particular company

(3) what was the hourly starting salary of their agricultural builders

(4) what was the anticipated additional employee needs of their firm within the next two years due to expansion or replacement needs

The second section of the employer survey was specifically designed to determine answers concerning employer attitudes. Question 8 asked if there are any definite expansion plans developed, or in the planning stage in the next five years. Of the respondents answering the questions, 50% stated yes and 50% answered no. This question verified that the agriculture building field is a rapid growth industry as one-half of this survey population indicated they had definite expansion plans.

Question 9 on the survey stated, "Have you ever hired students from any of the vocational schools in the area of agricultural buildings?" The respondents indicated 30% had hired graduates and 70% had not hired graduates. Question 10 read, if you have hired graduates, how well trained do you feel these people were? The possible answers were (a) very well trained, (b) well trained, (c) average and (d) not trained. Sixty-six point seven percent (66.7%) of the respondents felt the graduates were very well trained and 33.3% felt that they were educated to an average level.

Question 11 of the survey stated, "If you or your company have ever felt the need to dismiss a man that has graduated from vocational school, would you consider the primary factor to be: (a) poor attitude or personality conflict, (b) lack of necessary skills, (c) other. Of those responding 66.7% felt that poor attitude or a personality conflict was the major problem while 33.3% listed lack of desire as another factor.

The final question in this section, Question 12, "Do you feel it is important to increase the number of printed materials available specifically on erection of pole type structures? Of those returning the questionnaire, 20% felt it was very important, 40% felt it was important and 40% felt that it was not important.

GRADUATE CHARACTERISTICS: PART TWO

The following information relates only to the graduate part of the survey. Questions in Section One of the graduate survey dealt with years of employment experience, satisfaction with educational preparation, and related questions. Question 4 read, "Was vocational education training in agricultural buildings instrumental in obtaining your present employment?" Of those responding, 75% of the graduates stated yes and 25% stated no. Question 5 asked the following, "How satisfied were you with your vocational school training?" Of the possible answers of (a) highly satisfied, (b) satisfied, (c) unsatisfied and (d) highly unsatisfied; 55% of the graduates stated highly satisfied and 45% stated satisfied. None of the respondents indicated unsatisfied or highly unsatisfied. The last question stated "How adequately did you feel your shop equipment and facilities were?" The possible answers included (a) highly adequate, (b) adequate, (c) inadequate and (d) highly inadequate. Sixty-five percent of the graduates stated it was highly adequate while 35% thought the facilities only were adequate. This section indicated graduates of the Agricultural Building program are satisfied with the educational preparation and shop facilities and equipment.

The graduates were also asked in Section One to identify specific existing course areas which were to be increased or deceased. They were asked to evaluate the curriculum based upon their present occupational experience and its relationship to the curriculum. Table I illustrates the results of the graduates.

TABLE I

	TIME OF TRAINING			
	Increase	Sufficient	Decrease	Eliminate
Major Shop Course	30.0%	70.0%	----	----
Major Theory Courses	15.0	85.0	----	----
Ventilation Problems Course	35.0	55.0	10.0	----
Drafting & Blueprint Course	65.0	30.0	5.0	----
Materials Estimating Course	55.0	40.0	5.0	----
Applied Math Course	30.0	70.0	----	----
Communications Course	----	70.0	15.0	15.0
Employment Orientation Course	5.0	55.0	35.0	5.0
Related Welding Course	15.0	55.0	20.0	10.0
Other - more on the job	50.0	50.0	----	----

Recently the Agricultural Building Serviceman program graduation date was changed from the typical school year of May to an earlier date which corresponded to beginning of the construction season. Question 8 of this survey dealt with the April 15th graduation date. The graduates were asked to indicate if they believed it to be an asset to the agricultural buildings program or not. Of those responding to this question 78.9% felt that yes it was very important and 21.1% thought it may not have any definite bearing on the success of the program.

The students were also asked to indicate the greatest weakness of the program Table II indicates factors which were considered to be a hinderance to vocational training. The table indicates that 44.4% of the graduates felt that there were too many students per class and 27.7% indicated the course was too short. Eleven point one percent (11.1%) of the graduates thought there was a lack of social functions at the Institute with 5.6% stating curriculum problems. A few graduates also indicated that commuting to school was a problem.

TABLE II
AGRICULTURE BUILDINGS PROGRAM WEAKNESSES

Too many students per class	44.5%
Course too short	27.7
Lack of social functions	11.1
Other - Commuting to school	5.6
Curriculum problems	5.6
Cost of schooling	----
Inadequate shop facilities	----
Poor instruction	----

The last two questions in this section of the survey were designed to determine if the lack of a comprehensive text was a problem in instruction. Question 10 stated, "Do you feel there was enough printed material available specifically on the erection of agricultural buildings?" 60% of the graduates said yes and 40% said it was not a problem. The last question of the survey stated, "Do you feel that it is necessary to develop an erection manual specifically suited for training people in erection of pole type structures?" The possible answers were (a) very important, (b) important, (c) not important. Forty percent (40%) of the graduates felt it to be very important with 40% indicating it to be important and only 20% stating it was not important.

EMPLOYER OPINIONS OF IMPORTANCE OF AGRICULTURAL BUILDING SKILLS: PART THREE

The following tables represent a computation of data that was obtained from the employers surveyed throughout the state. The competencies listed were determined after a careful review of related literature and suggested tasks which were then presented to the advisory committee for review. Due to the diversity of the trade it was impossible to list all the skills necessary in the erection of pole type structures. The investigator believes, however, that a great majority of the job-entry skills or the mandatory skills needed to enter the agricultural building trade are itemized in the following tables.

The tables include the following subject areas:

(1) sight layout

(2) foundation construction

(3) pole placement

(4) wall framing

(5) truss construction

(6) roofing framing

(7) metal placement

TABLE III

SIGHT LAYOUT

	MUCH	SOME	NONE
Location selection	20.0%	70.0%	10.0%
Rough grading	10.0	80.0	10.0
Setting up builder's level	60.0	30.0	10.0
Locating building lines	60.0	30.0	10.0
Constructing batter boards	50.0	30.0	20.0
Locating corners of building	60.0	30.0	10.0
Testing corners for squareness	60.0	30.0	10.0
Locating line of excavation	40.0	50.0	10.0
Locating hole centers	50.0	40.0	10.0
Locating pier centers	50.0	30.0	20.0
Locating footings	50.0	40.0	10.0

TABLE IV

FOUNDATION CONSTRUCTION

	MUCH	SOME	NONE
Drilling post holes	50.0%	40.0%	10.0%
Drilling pier holes	40.0	50.0	10.0
Pouring footings	30.0	50.0	20.0
Pouring foundation walls	30.0	50.0	20.0
Installing drain tiles	10.0	50.0	40.0
Locating and installing pole anchor brackets	40.0	50.0	10.0

TABLE V

POLE PLACEMENT

	MUCH	SOME	NONE
Pad applications	40.0%	50.0%	10.0%
Pole setting	50.0	40.0	10.0
Pole positioning	60.0	30.0	10.0
Leveling corner poles	70.0	20.0	10.0
Leveling side poles	60.0	30.0	10.0
Leveling end poles	60.0	30.0	10.0
Pole bracing for holes filled with gravel	50.0	50.0	----
Pole bracing for holes filled with concrete	50.0	40.0	10.0

TABLE VI

WALL FRAMING

	MUCH	SOME	NONE
Laying out girts on outside of poles	40.0%	60.0%	----
Laying out girts on inside of poles	33.3	55.5	11.2%
Chalking lines for girts	33.3	44.4	22.3
Locating truss headers (if used)	40.0	60.0	----
Locating pole notch (if used)	44.4	55.6	----
Applying girts	40.0	60.0	----
Topping off poles	30.0	70.0	----
Notching poles with chain saw	33.3	66.7	----
Sidewall framing for outside door	40.0	60.0	----
Sidewall framing for inside door	30.0	70.0	----
Sidewall framing for walk-in doors	40.0	60.0	----
Door framing	40.0	60.0	----
Door track placement	30.0	70.0	----
Hardware application	40.0	60.0	----

TABLE VII

TRUSS CONSTRUCTION

	MUCH	SOME	NONE
Determine pitch	40.0%	40.0%	20.0%
Upper cord layout	30.0	40.0	30.0
Lower cord layout	30.0	40.0	30.0
Strut layout	30.0	40.0	30.0
Gusset application	30.0	40.0	30.0

TABLE VIII

ROOFING FRAMING

	MUCH	SOME	NONE
Laying out purlins on top of trusses	30.0%	70.0%	----
Laying out purlins on inside of trusses	20.0	60.0	10.0%
Chalking lines for purlins	22.2	55.6	22.2
Locating ridge purlin	30.0	70.0	----
Applying purlin brackets	22.2	66.7	11.1
Applying ledger strips	22.2	66.7	11.1

TABLE IX

METAL PLACEMENT

	MUCH	SOME	NONE
Sidewall applications	30.0%	70.0%	----
Endwall applications	30.0	70.0	----
Gable applications	44.4	55.6	----
Roof applications	30.0	70.0	----
Trim applications	40.0	60.0	----

GRADUATE OPINIONS OF IMPORTANCE OF AGRICULTURAL BUILDING SKILLS: PART IV

The following tables represent a computation of data that was obtained from the graduates surveyed throughout the state. The competencies listed were determined after careful review of related literature and suggested tasks which were then presented to the advisory committee for review. Due to the diversity of the trade it was impossible to list all the skills necessary in the erection of pole type structures. The investigator believes, however, that a great majority of the job entry skills or the manatory skills needed to enter the agricultural building trade are itemized in the following tables. The tables in part four are the same tables as in part three, however this data is for the graduates.

The tables include the following subject areas:

(1) site layout

(2) foundation construction

(3) pole placement

(4) wall framing

(5) truss construction

(6) roofing framing

(7) metal placement

TABLE X

SIGHT LAYOUT

	MUCH	SOME	NONE
Location selection	22.2%	66.7%	11.1%
Rough grading	20.0	70.0	10.0
Setting up builder's level	60.0	40.0	----
Locating building lines	75.0	25.0	----
Constructing batter boards	70.0	30.0	----
Locating corners of building	80.0	15.0	5.0
Testing corners for squareness	80.0	20.0	----
Locating line of excavation	55.0	40.0	5.0
Locating hole centers	63.1	36.9	----
Locating pier centers	20.0	55.0	25.0
Locating footings	21.1	63.1	15.8

TABLE XI

FOUNDATION CONSTRUCTION

	MUCH	SOME	NONE
Drilling post holes	66.7%	22.2%	11.1%
Drilling pier holes	26.3	42.1	31.6
Pouring footings	52.6	31.6	15.8
Pouring foundation walls	42.1	26.3	31.6
Installing drain tiles	11.2	44.4	44.4
Locating and installing pole anchor brackets	26.3	26.3	47.4

TABLE XII

POLE PLACEMENT

	MUCH	SOME	NONE
Pad applications	47.4%	42.1%	10.5%
Pole setting	63.1	31.6	5.3
Pole positioning	68.4	31.6	----
Leveling corner poles	73.6	21.1	5.3
Leveling side poles	68.4	26.3	5.3
Leveling end poles	68.4	26.3	5.3
Pole bracing for holes filled with gravel	52.6	36.9	10.5
Pole bracing for holes filled with concrete	63.1	26.3	10.6

TABLE XIII

WALL FRAMING

	MUCH	SOME	NONE
Laying out girts on outside of poles	63.1%	36.9%	----
Laying out girts on inside of poles	36.9	47.4	15.7%
Chalking lines for girts	474.	36.9	15.7
Locating truss headers (if used)	55.5	27.8	16.7
Locating pole notch (if used)	68.4	15.8	15.8
Applying girts	68.4	26.3	5.3
Topping off poles	57.8	42.2	----
Notching poles with chain saw	52.6	31.6	15.8
Sidewall framing for outside door	57.8	36.9	5.3
Sidewall framing for inside door	38.9	44.4	16.7
Sidewall framing for walk-in doors	42.1	52.6	5.3
Door framing	52.6	47.4	----
Door track placement	47.4	47.4	5.2
Hardware application	52.6	36.9	10.5

TABLE IXV

TRUSS CONSTRUCTION

	MUCH	SOME	NONE
Determine pitch	61.9%	28.6%	9.5%
Upper cord layout	57.2	33.3	9.5
Lower cord layout	60.0	30.0	10.0
Strut layout	50.0	40.0	10.0
Gusset application	60.0	30.0	10.0

TABLE XV

ROOFING FRAMING

	MUCH	SOME	NONE
Laying out purlins on top of trusses	65.0%	35.0%	----
Laying out purlins on inside of trusses	40.0	50.0	10.0
Chalking lines for purlins	40.0	35.0	25.0
Locating ridge purlin	65.0	35.0	----
Applying purlin brackets	40.0	40.0	20.0
Applying ledger strips	40.0	45.0	15.0

TABLE XVI

METAL PLACEMENT

	MUCH	SOME	NONE
Sidewall applications	70.0%	30.0%	----
Endwall applications	65.0	35.0	----
Gable applications	70.0	30.0	----
Roof applications	75.0	25.0	----
Trim applications	66.7	33.3	----

CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

The specific purpose of this study was to identify skills or tasks required for entry-level employment as a agriculture builder. After reviewing the resultant survey data, several summary statements may be made which can be interpreted as recommendations for the future preparation of agriculture buildings serviceman or related employment skill areas.

CONCLUSIONS

(1) The agriculture building occupational area is an employment area which will expand in the future.

(2) The employers definitely feel that graduates from the Wisconsin VTAE program in agriculture buildings are qualified for job-entry employment.

(3) The graduates indicated their training was adequate for job-entry level employment. They also were satisfied with the physical facilities and equipment at the Southwest Wisconsin Voational-Technical Institute.

(4) The students considered the greatest weakness of their educational preparation to be the number of students in a class with the duration of the course being the second major weakness.

(5) The graduates indicated that increased time should be given to the following subject areas: drafting and blueprint, on the job lab experience, materials estimating course, and ventilation problem course. Other course subject areas to be stressed included major shop, applied math and major theory instruction.

(6) According to employees, the individual skills that were most important to and agriculture builder include the following: leveling corner poles 70%, setting up builders level 60%, locating building lines 60%, locating corners of building 60%, testing corners for squareness 60%, pole position 60%, leveling side poles 60%, and leveling end poles 60%.

(7) According to the graduates, the individual skills that were most important to an agriculture builder include the following: locating corners of building 80%, testing corners for squareness 80%, locating building lines 75%, roof applications 75%, leveling corner poles 73.6%, gable application 70%, and sidewall application 70%.

(8) The following four skills are listed within the highest rank order by both the employers and the graduates: locating corners of buildings, leveling corner poles, locating building lines, and testing corners for squareness.

(9) The graduates consider the early graduation date of April 15 as being significant to finding employment in the agriculture buildings industry.

(10) A wide diversity of job skills are present in the agricultural buildings occupational area.

RECOMMENDATIONS

Based on the results of the study, the following recommendations are provided:

(1) The size of agriculture buildings classes should be reasonable to provide for greater personal contact with the students.

(2) The graduation date of April 15 should be continued to provide early entry of students into the labor market.

(3) The time spent in instruction in the following units should be increased and the curriculum should be expanded in the following areas: more shop experience, drafting and blueprint reading, materials estimating, ventilation problems, and applied math.

(4) The following skill areas should be thoroughly covered in the units of instruction: locating corners of buildings, pole positioning, leveling of poles, locating building lines, and testing corners for squareness.

(5) The time spent in instruction should have a heavy shop emphasis with special emphasis in on-the-job experience or actual pole building construction.

(6) A comprehensive resource text emphasizing pole building construction should be obtained or written to serve as a basic reference in instruction.

(7) A continued high level of interaction with industry and graduates should be maintained to keep the program constant with changing industrial needs.

(8) The reference text to be developed should utilize the task analysis and job competency approach to further improve the quality of instruction.

(9) An effort should be made to expand the program to accommodate additional students to meet the needs of the expanding agriculture buildings industry.

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APPENDIX A

AGRICULTURAL BUILDING SURVEY OF REQUIRED JOB-ENTRY SKILLS

The Wisconsin Board of Vocational, Technical and Adult Education has undertaken a task to determine strengths and weaknesses of the present Agricultural Buildings programs throughout the state vocational system. To reach their objectives they need your help in identifying skills and tasks that you believe are necessary to obtain job-entry level employment as builders. With this in mind would you please fill out the following short questionnaire in regard to various tasks and skills required to erect a pole type structure.

The first part of the survey is concerned with personal characteristics of your business. Please, very carefully, read and answer each question.

The second part of the questionnaire is a list of competencies which may relate to your job. Please check each task in the column which you feel is appropriate.

Your prompt assistance by June 2, 1975 is greatly appreciated. The results of this survey will help provide us with insight into providing better trained people for pole type structural erection. This survey will be confidential and your name will not be disclosed in the survey report.

Thank you.

Rodney A. Pasch

Rodney Pasch, Program Representative
Agricultural Buildings

sk
5/22/75

EMPLOYER ONLY

1. Name of construction company associated with _____

2. Name (optional) _____

3. ☐ owner ☐ company manager ☐ general foreman ☐ other _____

4. Number of years' experience in agri-building trade _____

5. Number of employees in your company _____

6. Hourly -- starting salary of agri-builders _____

7. Anticipated additional employee needs within two years _____

8. Are there any definite expansion plans developed, or in the planning stage, in the next five years?

   ☐ Yes ☐ No

9. Have you ever hired students from any of the state vocational schools in the area in agri-building?

   ☐ Yes ☐ No How many? _____

10. If Yes, how well trained did you feel these people were?

    ☐ A. Very well trained
    ☐ B. Well trained
    ☐ C. Average
    ☐ D. Untrained

11. If you or your company have ever felt the need to dismiss a man that had graduated from vocational school, what would you consider the primary factor to be?

    ☐ A. Poor attitude or personality conflict
    ☐ B. Lack necessary skills
    ☐ C. Other _____

12. Do you feel there are enough printed materials available specificly on the erection of agricultural buildings?

    ☐ Yes ☐ No

13. Do you feel it is necessary to develop an erection manual especially suited for training people in erection of pole type structures?

    ☐ A. Very important
    ☐ B. Important
    ☐ C. Not important

AG. BUILDING COMPETENCIES	MUCH	SOME	NONE
SITE LAYOUT			
1. Location selection			
2. Rough grading			
3. Setting up builder's level			
4. Locating building lines			
5. Constructing batter boards			
6. Locating corners of building			
7. Testing corners for squareness			
8. Locating line of excavation			
9. Locating hole centers			
10. Locating pier centers			
11. Locating footings			
FOUNDATION CONSTRUCTION			
1. Drilling post holes			
2. Drilling pier holes			
3. Pouring footings			
4. Pouring foundation walls			
5. Installing drain tiles			
6. Locating and installing pole anchor brackets			
POLE PLACEMENT			
1. Pad applications			
2. Pole setting			
3. Pole positioning			
4. Leveling corner poles			
5. Leveling side poles			
6. Leveling end poles			
7. Pole bracing for holes filled with gravel			
8. Pole bracing for holes filled with concrete			
WALL FRAMING			
1. Laying out girts on outside of poles			
2. Laying out girts on inside of poles			
3. Chalking lines for girts			
4. Locating truss headers (if used)			
5. Locating pole notch (if used)			
6. Applying girts			
7. Topping off poles			
8. Notching poles with chain saw			
9. Sidewall framing for outside door			
10. Sidewall framing for inside door			
11. Sidewall framing for walk-in doors			
12. Door framing			
13. Door track placement			
14. Hardware application			

AG. BUILDING COMPETENCIES	MUCH	SOME	NONE
TRUSS CONSTRUCTION			
1. Determine pitch			
2. Upper cord layout			
3. Lower cord layout			
4. Strut layout			
5. Gusset application			
ROOFING FRAMING			
1. Laying out purlins on top of trusses			
2. Laying out purlins on inside of trusses			
3. Chalking lines for purlins			
4. Locating ridge purlin			
5. Applying purlin brackets			
6. Applying ledger strips			
METAL PLACEMENT			
1. Sidewall applications			
2. Endwall applications			
3. Gable applications			
4. Roof applications			
5. Trim applications			

Would you like a copy of the survey results?

___ Yes ___ No

Name _____

Address _____

_____

APPENDIX C

AGRI-BUILDER GRADUATE

1. Name of the company associated with (if employed) _____

2. Name (optional) _____

3. Number of years experienced in the agri-buildings trade? _____

4. Was vocational education training in agricultural buildings instrumental in obtaining your present employment?

☐ Yes ☐ No

5. How satisfied were you with your vocational school training?

☐ A. Highly satisfied
☐ B. Satisfied
☐ C. Unsatisfied
☐ D. Highly unsatisfied

6. How adequate did you feel your shop equipment and facilities were?

☐ A. Highly adequate
☐ B. Adequate
☐ C. Inadequate
☐ D. Highly Inadequate

7. Considering your previous vocational school training, check the following areas that you feel would apply to improve the overall agricultural building program.

	TIME			
	Increase	Sufficient	Decrease	Eliminate
Major Shop Course				
Major Theory Courses				
Ventilation Problems Course				
Drafting & Blueprint Course				
Materials Estimating Course				
Applied Math Course				
Communications Course				
Employment Orientation Course				
Related Welding Course				
Other				

8. Do you consider April 15 graduation date an asset to the agricultural building program?

☐ Yes ☐ No

9. During your vocational educational training what would you consider the biggest hinderance?

☐ A. Inadequate shop facilities
☐ B. Poor instruction
☐ C. Curriculum problems
☐ D. Course too short
☐ E. Too many students per class
☐ F. Lack of social functions
☐ G. Cost of schooling
☐ H. Other _____

10. Do you feel there was enough printed material available specificly on the erection of agricultural buildings?

☐ Yes ☐ No

11. Do you feel it is necessary to develop an erection manual especially suited for training people in erection of pole type structures?

☐ A. Very Important
☐ B. Important
☐ C. Not Important

AG. BUILDING COMPETENCIES	MUCH	SOME	NONE
SITE LAYOUT			
1. Location selection			
2. Rough grading			
3. Setting up builder's level			
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11. Sidewall framing for walk-in doors			
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6. Applying ledger strips			
METAL PLACEMENT			
1. Sidewall applications			
2. Endwall applications			
3. Gable applications			
4. Roof applications			
5. Trim applications			

Would you like a copy of the survey results?

___ Yes ___ No

Name _____

Address _____

_____

Southwest Wisconsin Vocational-Technical Institute

Bronson Boulevard
Fennimore, Wisconsin 53809
Phone: 608-822-3262

AGRICULTURAL BUILDINGS SERVICEMAN ADVISORY COMMITTEE MEMBERS

Eugene Cooley
Boscobel, WI

Cecil Dobson
Boscobel, WI

John Fleming
Richland Center, WI

Peter Huza
Cobb, WI

L.M. Schlump
Boscobel, WI

Milton Wepking
Fennimore, WI

Agricultural Buildings Serviceman
Advisory Committee Meeting

Date and Time: April 4, 1974 - 6:30 P.M.

Location: Cafeteria and Room 119, Southwest Wisconsin Vocational-Technical Institute

Members Present:
Mr. Eugene Cooley - Boscobel
Mr. Cecil Dobson - Boscobel
Mr. L. M. Schlump - Boscobel
Mr. Milton Wepking - Fennimore

Members Absent:
Mr. John Fleming - Richland Center
Mr. Peter Huza - Cobb

School Representatives Present:
Mr. Mick Gundlach
Dr. Wayne Gustafson
Mr. Rodney Pasch
Mr. Wayne Raymond
Mr. James Stephenson
Mr. Dan Wagner

The meeting was called to order by Mr. Pasch.

Mr. Cooley and Mr. Wepking informed the other advisory committee members on the recent evaluation from the state office. A recommendation by the evaluating committee was related by Mr. Cooley showing the need to have Ag. Building students complete the program by, at least, April 15 in order to enter the job market at the appropriate time. Mr. Schlump mentioned some more distinct advantages to such a proposal. A motion was made by Mr. Wepking that necessary action be taken to implement the evaluation committee recommendation that the program be ended by April 15. Motion was seconded by Mr. Cooley. Motion was carried.

The budget and equipment list for 1974-1975 was presented to the committee by Mr. Pasch. After discussion, a motion was made by Mr. Cooley and seconded by Mr. Wepking to adopt the equipment list.

Mr. Pasch presented a possible initiation of a Federal Project on developing curriculum to the committee. The project would be completed by July 1, 1975; if implemented. Mr. Cooley expressed a most definite need for developing specific material relating to erection to be used in instruction of Farm Building students. A motion was made and seconded to inititate the necessary Federal Project. Mr. Dan Wagner, administrator of Research and Planning, informed the committee on the route necessary in providing for that particular Federal Project.

In final business, the committee expressed condolence at the death of Mr. Dan Burnham, an original member of the committee. Peter Huza was accepted as his replacement.

The meeting adjourned.

cjp

APPENDIX E

Agricultural Buildings Serviceman
Advisory Committee Meeting

Date and Time: April 24, 1975 - 6:30 p.m.

Location: Cafeteria and Room 119, Southwest Wisconsin Vocational-Technical Institute

Members Present: Mr. Ron Austin - Platteville
Mr. Eugene Cooley - Boscobel
Mr. Cecil Dobson - Boscobel
Mr. Peter Huza - Cobb
Mr. L. M. Schlump - Boscobel
Mr. Milton Wepking - Fennimore

Members Absent: Mr. John Fleming - Richland Center

School Representatives Present: Mr. Rodney Pasch
Mr. Wayne Raymond
Mr. Roger Schrader
Mr. Dan Wagner

Student Representative: Mr. Joe Junk

The meeting was called to order by Mr. Pasch.

Mr. Pasch introduced Mr. Wagner, Administrator of Research & Planning, who informed the committee on the Agri. Building Federal Project now in process. After lengthy discussion, Mr. Pasch request the assistance of the committee in reviewing the survey instrument before being sent out. The committee agreed to assist wherever possible. Mr. Cooley stated he had some related material that could also be of value to the project.

The budget and equipment list for 1975-76 was presented to the committee by Mr. Pasch. Mr. Austin stated that the shear's requested was an excellent one and essential to the program operation. A motion was made by Mr. Dobson and seconded by Mr. Schlump to adopt the equipment budget.

Presentations were made by Joseph Junk, a student presently enrolled in the program, and Peter Huza, a graduate. Both reflected progress made by the Ag. Building program.

The meeting adjourned.

cjp

cc: R. Duffy
M. Gundlach